

WHAT IS CLAIMED IS

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1. An authentication apparatus
- comprising:
- an acquiring section to acquire first feature
- information;
- 10 an extracting section to extract, from a
- database which registers feature information in
- correspondence with each user, a user corresponding
- to feature information having a degree of matching
- exceeding a predetermined value with respect to the
- 15 first feature information; and
- a registering section to register the first
- feature information in the database together with
- accessory information related to said feature
- information.
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2. The authentication apparatus as
- 25 claimed in claim 1, further comprising:
- a control section to output a message urging
- changing of parameters indicating feature
- information reading conditions and re-reading of the
- first feature information if a number of the feature
- 30 information having the degree of matching exceeding
- the predetermined value exceeds a specific value, so
- as to acquire the re-read first feature information
- by said acquiring section.

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3. The authentication apparatus as claimed in claim 1, further comprising:

5 a control section to urge the user to read second feature information and acquire the read second feature information by said acquiring section if a number of the feature information having the degree of matching exceeding the predetermined value exceeds a specific value.

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4. The authentication apparatus as claimed in claim 3, wherein said registering section registers the second feature information in the database.

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5. The authentication apparatus as claimed in claim 3, wherein the first feature information and the second feature information are the same kind of feature information or mutually different kinds of feature information.

30 6. An authentication apparatus comprising:

an acquiring section to acquire personal identification information and feature information of a user;

35 a obtaining section to read, from a database having registered feature information in correspondence with at least personal identification

information, registered feature information and
accessory information respectively corresponding to
the acquired personal identification information,
and to obtain a degree of matching of the acquired
5 feature information and the registered feature
information read from the database; and

a confirming section to confirm the user
identified by the acquired personal identification
information if a degree of matching of the
10 registered feature information read from the
database and each registered feature information
corresponding to personal identification information
indicated by the accessory information read from the
database is smaller than the degree of matching
15 obtained by said obtaining section.

20 7. An authentication apparatus
comprising:

an acquiring section to acquire first and
second feature information of a user;

an extracting section to extract, from a
25 database which registers first and second registered
feature information together with accessory
information related to predetermined users for which
a degree of matching of the first registered feature
information exceeds a predetermined value, specific
30 accessory information corresponding to the first
registered feature information having a degree of
matching which is a maximum value with respect to
the acquired first feature information; and

a confirming section to confirm the user if a
35 degree of matching of the acquired second feature
information and the second registered feature
information registered in the database in

correspondence with the first registered feature
information having the degree of matching which is
the maximum value is greater than a degree of
matching of the acquired second feature information
5 and the second registered feature information
corresponding to the specific accessory information.

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8. The authentication apparatus as
claimed in claim 7, wherein the first feature
information and the second feature information are
the same kind of feature information or mutually
15 different kinds of feature information.

20 9. A computer-readable storage medium
which stores a computer program for causing a
computer to carry out an authentication process,
said computer program comprising:
an acquiring procedure causing the computer to
25 acquire first feature information;
an extracting procedure causing the computer to
extract, from a database which registers feature
information in correspondence with each user, a user
corresponding to feature information having a degree
30 of matching exceeding a predetermined value with
respect to the first feature information; and
a registering procedure causing the computer to
register the first feature information in the
database together with accessory information related
35 to said feature information.

10. The computer-readable storage medium as claimed in claim 9, wherein the computer program further comprises:

5 a control procedure causing the computer to output a message urging changing of parameters indicating feature information reading conditions and re-reading of the first feature information if a number of the feature information having the degree of matching exceeding the predetermined value
10 exceeds a specific value, so as to acquire the re-read first feature information by said acquiring section.

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11. The computer-readable storage medium as claimed in claim 9, wherein the computer program further comprises:

20 a control procedure causing the computer to urge the user to read second feature information and acquire the read second feature information by said acquiring section if a number of the feature information having the degree of matching exceeding
25 the predetermined value exceeds a specific value.

30 12. The computer-readable storage medium as claimed in claim 11, wherein said registering procedure causes the computer to register the second feature information in the database.

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13. The computer-readable storage medium
as claimed in claim 11, wherein the first feature
information and the second feature information are
the same kind of feature information or mutually
5 different kinds of feature information.

10 14. A computer-readable storage medium
which stores a computer program for causing a
computer to carry out an authentication process,
said computer program comprising:
an acquiring procedure causing the computer to
15 acquire personal identification information and
feature information of a user;
a obtaining procedure causing the computer to
read, from a database having registered feature
information in correspondence with at least personal
20 identification information, registered feature
information and accessory information respectively
corresponding to the acquired personal
identification information, and to obtain a degree
of matching of the acquired feature information and
25 the registered feature information read from the
database; and
a confirming procedure causing the computer to
confirm the user identified by the acquired personal
identification information if a degree of matching
30 of the registered feature information read from the
database and each registered feature information
corresponding to personal identification information
indicated by the accessory information read from the
database is smaller than the degree of matching
35 obtained by said obtaining section.

15. A computer-readable storage medium which stores a computer program for causing a computer to carry out an authentication process, said computer program comprising:

5 an acquiring procedure causing the computer to acquire first and second feature information of a user;

 an extracting procedure causing the computer to extract, from a database which registers first and
10 second registered feature information together with accessory information related to predetermined users for which a degree of matching of the first registered feature information exceeds a
 predetermined value, specific accessory information
15 corresponding to the first registered feature information having a degree of matching which is a maximum value with respect to the acquired first feature information; and

 a confirming procedure causing the computer to
20 confirm the user if a degree of matching of the acquired second feature information and the second registered feature information registered in the database in correspondence with the first registered feature information having the degree of matching
25 which is the maximum value is greater than a degree of matching of the acquired second feature information and the second registered feature information corresponding to the specific accessory information.

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16. The computer-readable storage medium
35 as claimed in claim 15, wherein the first feature information and the second feature information are the same kind of feature information or mutually

different kinds of feature information.

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